

## Seattle Public Utilities - Policy & Procedure

<b>Subject:</b>		<b>Number:</b> SPU-DR-01-07
<b>Standard, Connection, and Administrative Charges Rule</b>		<b>Effective:</b> January 1, 2007
		<b>Supersedes:</b> SPU-DR-05-06
<b>Approved:</b> Chuck Clarke	<b>Date:</b> 12/7/2006	<b>Page(s):</b> 16

### 1.0 PURPOSE

- 1.1 To set fees for special recurring and non-recurring services provided by Seattle Public Utilities.

### 2.0 REFERENCES

- 2.1 Seattle Municipal Code 21.04.100, 21.04.105, 21.04.125, 21.04.465, 3.02

### 3.0 DEFINITIONS

- 3.1 **Time and Materials** – the cost of a service as calculated by Seattle Public Utilities, including labor, equipment, materials, applicable permit fees and taxes, pavement restoration, overhead costs and any similar costs incurred by SPU while performing the service.
- 3.2 **Normal Hours** – Monday through Friday from 7:30am to 4pm, excluding those holidays observed by the City of Seattle.
- 3.3 **Extended Hours** – Monday through Friday from 4pm to 9pm from April through October, excluding those holidays observed by the City of Seattle.
- 3.4 **After Hours** – times other than normal hours or extended hours

### 4.0 POLICY

#### 4.1 New Service Installation

##### 4.1.1 Standard Charges for installation of new service:

##### Domestic Services

<u>Size</u>	<u>Fee</u>
3/4"	\$3,219
1"	\$3,336
1 1/2"	\$5,618
2"	\$7,461
3" CT	\$21,389
4" CT	\$28,880

6" CT \$34,632

\*Note: If 3/4" - 2" new service is being installed with developer water main, see item 4.29.

### Combination Fire/Domestic Services

<u>Size</u>	<u>Fee</u>
4" in residential street	\$21,652
4" in arterial street	\$31,133
6" in residential street	\$25,281
6" in arterial street	\$34,410
8" Time and Materials, deposit	\$50,000

### Fire Services

<u>Size</u>	<u>Fee</u>
2" DC	\$7,022
4"	\$19,048
6"	\$19,078
8"	\$22,647

### Service Conversions

Existing 4" DC to 4" Combo	\$21,652
Existing 6" DC to 6" Combo	\$25,281
Existing 8" DC to 8" Combo	Time&Materials, \$50,000 deposit
Existing 4" DC to 4" Combo – Central Business Core	\$31,133
Existing 6" DC to 6" Combo – Central Business Core	\$34,410
Existing 8" DC to 8" Combo – Central Business Core	Time&Materials, \$50,000 deposit

Note – Service Conversions are subject to the connection charge in 4.1.2

### Other New Service Installation Standard Charges

- All required City, County, and/or State, and other permits and fees are in addition to the standard charges listed above. Current permit fees are shown below for reference:
  - In unincorporated King County: add \$100 permit fee plus \$125/hr County inspection fee.
  - In Shoreline: add permit and inspection fee of \$199/hr
  - In Lake Forest Park: add \$200 permit and inspection fee
  - Within Seattle City Limits: 3" or larger meters and/or installations on arterial streets - add \$185 street use permit fee.
- For 3/4" and 1" services installed in conjunction with new water main construction, if ordered 30 days prior to estimated start of construction: \$222 reduction from standard charges.
- For 2" and smaller domestic services installed concurrently with fire services in a common trench: 3/4" or 1" - \$351 reduction from standard charge. 1 1/2" or 2" - \$585 reduction from standard charge.
- For 10" and larger services (all types) – time and materials.

- All services requiring installation in casings - standard charge plus casing bid price.
- Properties with two abutting mains: service installed at standard charge when main to be tapped is selected by Seattle Public Utilities (SPU). Time and materials if installation is otherwise.
- Time and materials, but not less than the applicable standard charge, for all purveyor services, for all services tapped on transmission mains or for special circumstances as determined by the Director of Seattle Public Utilities (SPU), or designee.
- Contractor Standby Charge – when site/contractor not ready as previously scheduled \$ 351 per event
- Isolation valve, if required:

8" Isolation valve -	\$6,847
10" Isolation valve -	\$7,959
12" Isolation valve -	\$11,645
16" or larger - Time and materials, deposit	\$18,000
- Ring and Cover Casting, if required

For new or existing ¾", 1" and all fire service:	\$351 additional
For new or existing 1½" or 2" domestic services:	\$158 additional
- Automated Meter Reading equipment, if required by meter installation standards:

2" or smaller meter:	\$187 additional
3" or larger, single register (fire service)	\$218 additional
3" or larger, two register (domestic or combo)	\$368 additional
3" or larger, 2 register, with fire service in the same chamber	\$518 additional

#### 4.1.2 New Service Connection Charge

The new service connection charge is in addition to the metered service installation charges shown above. The charge is based on the Connection Charge Unit Rate of \$798. Fire-only services will be charged 40% of the corresponding new service connection charge.

The connection charge rate results in connection costs of:

¾"	\$798
1"	\$1,357
1 1/2"	\$2,633
2"	\$4,229
3"	\$8,778
4"	\$13,566
6"	\$26,334
8"	\$42,294
10"	\$61,446
12"	\$82,992
16"	\$134,064

20"	\$194,712
24"	\$263,340

#### 4.2 Service Size Increase

- To increase service size of existing 2" and smaller service in the same location (within 30" of existing service) at customer request - applicable new service installation charge will be made (see Item 4.1.1). No charge for meter removal or retirement will be made. Subject to limitations established by Director of SPU, or designee.  
**EXCEPTION:** To renew and increase 1/2" or 3/4" steel or plastic service to 1" copper service in same location (within 30" of existing service) at customer request - \$252
- Size increase request at a location exceeding 30" from existing service will be subject to a new service installation charge (Item 4.1.2) and service retirement charges (Item 4.6) for the existing service.
- Service size increases are subject to the Connection Charge.

#### 4.3 Service Size Reduction (within 30" of existing service).

- 2" and under - when reduced to smaller size - \$281
- All other sizes – time and materials

#### 4.4 Meter Test (At request of customer)

Charge will be waived if tested meter is found to be over-registering.

- Tests Conducted at the Meter Shop:

Meter Shop test of 1" or smaller meter:	\$130
Meter Shop test of 1 1/2" meter:	\$350
Meter Shop test of 2" meter:	\$459
Larger than 2" meter: Time and materials - deposit	\$500
- Field Testing of 1" or Smaller Meters - \$74
- Field Testing Retail Service Meters Outside Seattle Direct Service Area - \$524

#### 4.5 Meter Removal

3/4" or 1" meter:	\$60
1 1/2" or 2" meter:	\$101
3" to 8" meter:	\$826
Larger than 8" meter: Time and materials - deposit	\$800
Removal of illegal jumper:	\$60

#### 4.6 Service Retirement

Abandonment with or without meter removal. This charge also applies to a customer requested service transfer from one abutting water main to another, not related to new water main construction.

1" and smaller:	\$1,192
1 1/2" and 2":	\$1,575
3" :	\$1,943
4" and larger: Time and Materials - deposit	\$7,000

#### 4.7 Meter Reset

For meter resets following customer-requested removals:

3/4" meter	\$104
1" meter:	\$151
1 1/2" meter :	\$310
2" meter:	\$411
3" or larger meter: Time and materials—deposit	\$700

Install Temporary Service Jumper	
2" and smaller:	\$ 96
3" and larger: Time and materials – deposit	\$700

For meter resets following credit-related removals:

	<u>Normal Hours</u>	<u>All Other Times</u>
3/4" or 1" meter:	\$ 69	\$198
1 1/2" or 2" meter:	\$116	\$198
3" or larger meter:		
Time and materials – \$700 deposit		\$700 deposit

Install Temporary Service Jumper	
2" and smaller:	\$ 96
3" and larger: Time and materials – deposit	\$700

NOTE: If reduction in size occurs at time of reset, then charge reduction fee only.

#### 4.8 Special Field Trips

- Meter Shut-Off or Turn-On Charge - Including Fire Services. Charges are for each trip.

	<u>Normal Hours</u>	<u>Extended Hours</u>	<u>After Hours</u>
3/4 - 2" meter -	\$ 43	\$ 106	\$241
3" & larger -	\$158	\$301	\$301

This charge may be suspended in special circumstances as determined by the Director of SPU or designee.

No charge for the first trip for a credit related turn-on during SPU normal business hours. Second and subsequent trips - subject to applicable standard charge above.

- Investigate On-Property Loss of Water

When loss of water is caused by actions taken on-property - Same charge as for meter turn-ons and shut-offs, above.

When investigating leaks on-property when the City water service line is intact - Same charge as for meter turn-ons and shut-offs, above.

- Inspection Services: Re-inspection required because the requesting customer is not ready for inspection by deadline or stated date - \$66

- Special Meter Read

For Actual Readings meters of all sizes ordered in connection with property ownership or occupancy changes - \$69  
For Obstructed Meter Readings - \$77

- Adjust buried, obstructed or low meter boxes or valve boxes caused by customer installed landscaping or resurfacing (<sup>3</sup>/<sub>4</sub>" to 2" meters) - \$381
- Trim customer-installed vegetation obstructing meter boxes or fire hydrants - \$82
- Replace customer damaged lock - \$24.50

#### 4.9 Statement of Combined Utility Account

- For request by customer for billing system screen-print statement of account activity for each 12 month period - \$6
- For request by customer for formal statement of account activity, for each account number per 12-month period - \$43
- For request by another utility for water consumption information to be used for billing the retail services of that utility - \$1.86 per account for information covering any period of 12 months or less.

#### **4.10 Process Returned Check or Draft**

Includes checks returned for non-sufficient funds or other reasons which prevent processing - \$25

#### **4.11 Collection Charges**

- Late Payment Charge. Past due balances may be subject to a late payment charge that will include one or both of the following charges:

Collection Notice Charge: \$10 for active account Urgent or Shutoff Notice, or closed account Final Notice.

Delinquent Interest Charge: Monthly interest at the legal rate on past due balances.

- Credit field visit in same bill period - \$34
- Service shut off charge for non-payment – See Item 4.8

#### **4.12 Duplicate Bill Preparation**

For all duplicate bills produced at customer request after original bill was produced - \$5

#### **4.13 Delayed Final Customer Billing**

For request for final customer bill when notification is received more than 45 days after final bill date - \$31

#### **4.14 Acquisition of Hydraulic Flow Data**

- Where records are available for fire protection grading purposes - No charge
- SPU measures hydrant flow, flushes main, and prepares flow test report - \$1,274
- Contractor measures hydrant flow with SPU assistance, SPU flushes main and reviews flow test results prepared by contractor - \$814
- Performance of hydraulic analysis and report to determine best alternative to meet or exceed fire flow requirements. Time and materials with \$2,000 deposit.
- Preparation of Hydraulic Modeling Simulation Report, when a flow test is not feasible, during a declared water emergency, or when a calibrated hydraulic model is available - \$210

#### **4.15 Non-Firefighting Hydrant Use Permit**

- Permit fee: \$27
- Charge for water use:  
If water use is less than 8,000 gallons per day:  
    \$24 per day September 16 - May 15  
    \$36 per day May 16 - September 15
- For water use above 8,000 gallons per day, a hydrant meter is required and commercial rates are charged.
- During a declared water emergency, any hydrant permit users allowed to continue their permits will be charged at established surcharge commercial rate, if any.
- Billing fee: \$63 for billing made by SPU for payment subsequent to hydrant permit use.
- Hydrant valve and meter assembly: \$400 deposit for use of any SPU supplied hydrant equipment and material. Deposit refunded upon return of all equipment and material in same-as-issued condition. In the event of damaged equipment, SPU will keep a portion of the deposit equal to the cost of the damaged equipment, including overhead cost.  
    Installation and removal: \$72 each

Water use charged at the commercial rate or surcharge commercial rate if during a declared water emergency.

#### **4.16 Paint Hydrant**

Paint Hydrant at customer request - \$121

#### **4.17 Hydrant Reset**

Set hydrant back or move closer to water main, where no re-tapping of main is required.

- Inside Seattle City Limits - \$4,386 (includes street use permit fee of \$185)
- Outside Seattle City Limits - \$4,201, plus any of the following additional charges that may be required:  
    quick connect adapter - \$247  
    any city or County permitting, plan review or inspection fees.

#### **4.18 Hydrant Relocation**

Remove existing hydrant and move to new location, new tap on main required.

- Inside Seattle City Limits - \$6,959 (includes street use permit fee of \$165)

- Outside Seattle City Limits - \$6,774, plus any of the following additional charges that may be required:
  - quick connect adapter - \$247
  - any city or County permitting, plan review or inspection fees.

#### **4.19 Install New Hydrant on Existing Water Main**

- Inside Seattle City Limits - \$5,095 (includes street use permit fee of \$185)
- Outside Seattle City Limits - \$4,910, plus:
  - quick connect adapter - \$247
  - any city or County permitting, plan review or inspection fees.
- For new hydrants requiring supply lines in excess of 10 feet in length, the charge will be the greater of:
  - The applicable standard charge listed under (a) or (b) above; or,
  - Time and materials.

#### **4.20 Install Vertical Extension on Existing Hydrant**

- Inside Seattle City Limits - \$840 (includes street use permit fee of \$185)
- Outside Seattle City Limits - \$655 plus any city or county permitting, plan review or inspection fees.

#### **4.21 Cross-Connection Control Program**

Charge for mailing reminder letters to customers who do not provide acceptable proof of satisfactory performance test of their backflow preventers within 30 days of receiving original notification, or to customers who have not installed backflow preventers as required - \$33 for each backflow preventer.

- Hanging shut-off notices - \$64
- Shut-off & turn-on – Applicable standard charge for Special Field Trip as specified in Section 4.8.

#### **4.22 Access Along or Crossing Transmission Right-Of-Way**

- Gate Opening
  - Minimum - \$139
  - Charge may be in excess of the minimum depending upon the circumstances of opening.
- Pipeline Crossing – Time and materials for employees and equipment stationed to protect the pipeline during crossing

#### **4.23 Additional Services Which Are Billed As Time and Materials**

- Relocation of Meter and Box - Limited to a lateral move of 30" - deposit amount to be determined upon order.
- Service Damage - For repair of damaged curb stop or meter setter, tailrun, etc. – time and materials, \$150 minimum.
- Water main Cut and Cap - For cut, cap and block of existing water main - deposit amount to be determined upon order.
- Design and/or Install Pressure Reducer

SPU Design: Time and materials - \$8,200 deposit

Installation (by SPU): Time and materials.

4" PR (2" Bypass) \$31,000 deposit

6" PR (2" Bypass) \$33,000 deposit

8" PR (4" Bypass) \$41,000 deposit

The deposit amounts listed above are the expected project costs, and do not include the cost of street repair. Street repair costs will be borne by the developer.

- Work Outside Normal Business Hours - All work performed outside of SPU normal business hours due to customer request, or due to customer water supply concerns, will be charged at an overtime rate.
- State DOT Right-Of-Way - When any work is to be performed in a SDOT right-of-way which necessitates a Letter of Justification - \$600 deposit required for application to SDOT by SPU.
- Installation Plans - Water meter and fire hydrant installation plans may be prepared by SPU at the developer's expense. The cost to prepare the plans depends primarily on the availability of as-built information and the number and complexity of the existing utilities. An advance deposit of \$360 is required from the customer before design work begins.

### **DEVELOPER PROJECTS**

**NOTE: Charges paid more than 12 months in advance of work performed will be recharged at current years rate.**

#### **4.24 Water Main Connection**

For cut-in tee connection to charged water mains, SPU furnishes sleeve(s) to connect new tee into existing main. For wet tap connection, SPU furnishes tapping sleeve and tapping valve. Contractor furnishes all other materials, tees, valves, valve boxes and lids, fittings, sleeves, excavation, backfill, compaction and restoration. SPU performs shutdown and draining of existing mains, connection of new main, and restoration of service - \$3,928 per connection.

**4.25 Water Quality Inspection, Sample Collection and Bacteriological Testing**

- \$527 for first 500 feet;
- \$386 for each additional 500 feet thereafter.

**4.26 Design Review, Plan Approval, Administration and Acceptance of Main**

- \$1,311 per water main project.
- CD-ROM containing GIS data of water system infrastructure associated with the water main project. - \$175

**4.27 Construction Inspection**

Rate includes travel to and from job site

0 – 350 lineal feet - \$5,247

351 – 700 lineal feet - \$6,471

701 - 1,050 lineal feet - \$9,444

Over 1,050 lineal feet requires Special Estimate (time & materials, \$82/hr)

Time and materials will be charged for re-inspection caused by contractor.

**4.28 Compaction Tests –**

Required when contractor uses native or imported backfill instead of control density fill (includes In-place density per ASTM D 2922 & Maximum dry density per ASTM D 698) - \$469

**4.29 New Service Installation (Developer) –**

Standard Charges will be reduced for new service installation (3/4"- 2" domestic) in conjunction with developer installed watermain. None of the discounts for non-developer service installations listed in Section 1 apply to the developer fees listed below.

- The following conditions must be met:
  - Property is within the direct service area of Seattle's water utility; and,
  - Developer is installing a water main to serve the property; and,
  - The Developer will open trench and backfill, and complete all street/sidewalk paving restoration

NOTE: If above conditions are not satisfactorily met, Developer will pay SPU on a time and materials basis for completion of work.

- Charges for new service installations meeting the conditions in (a) are:

3/4" Domestic	\$1,147
1" Domestic	\$1,258
1 1/2" Domestic	\$2,954
2" Domestic	\$3,219
2" Fire Service	\$3,704

## **REAL PROPERTY SERVICES**

### **4.30 Easements**

- Easement acquired for water distribution system in private road, not part of a street vacation application - \$2,438, only when plan review, survey, easement drafting and construction inspection is paid for separately, e.g. developer-designed-and-installed water projects
- Easement or Reservation of Rights acquired or granted: Minimum \$10,000 deposit towards time-and-material for coordination, review, issuance of easement and authorizing legislation

### **4.31 Crossing Permits**

New permit required for each new owner as permit does not run with the land.

#### **4.31.1 Permit for utility crossings within SPU fee-owned property over or under SPU water transmission pipelines**

- Initial review or Issuance and Recording permit estimated to require up to 16 hours of SPU time for review or issuance - \$1,300, or

Minimum \$3,000 deposit towards time-and-material for permit estimated to require over 16 hours of SPU time for review, issuance, recording

- \$320 administrative fee due whenever property ownership (permittee) changes with no change in use

#### **4.31.2 Permit for privately owned road or driveway crossing over SPU fee-owned property.**

- Initial review or Issuance and Recording permit estimated to require up to 16 hours of SPU time for review or issuance - \$1,300, or

Minimum \$3,000 deposit towards time-and-material for permit estimated to require over 16 hours of SPU time for review, issuance, recording

- \$320 administrative fee due whenever property ownership (permittee) changes with no change in use

#### 4.32 Use Permits

For use of SPU's fee-owned property, excluding utility crossing of SPU's transmission lines covered in Crossing Permit. New permit is required for each new owner as permit does not run with the land.

##### 4.32.1 Utility uses (in non-tunnel location)

- Initial review or Issuance and Recording permit estimated to require up to 16 hours of SPU time for review or issuance - \$1,300, or

Minimum \$3,000 deposit towards time-and-material for permit estimated to require over 16 hours of SPU time for review, issuance, recording

- Annual Use fee (may be reduced based on off-setting benefits to SPU, e.g., decrease in City's maintenance costs)

**For linear use:** \$250.00, plus 25 cents per linear foot over 1,000 feet, or

**For surface use:** either appraised fair market value, or 10% of 50% of the assessed value of the adjoining property

- Change of Permittee- \$405 to issue new permit when ownership (Permittee) changes with no change in use

##### 4.32.2 Utility uses (in SPU tunnel)

- Initial review or Issuance and Recording permit estimated to require up to 16 hours of SPU time for review or issuance - \$1,300, or

Minimum \$3,000 deposit towards time-and-material for permit estimated to require over 16 hours of SPU time for review, issuance, recording

- Annual Use fee (may be reduced based on off-setting benefits to SPU, e.g. conduit installed for City use)

\$767 for each conduit or interduct under 2-inches diameter  
\$1534 for each conduit 2-3-inches diameter  
\$2300 for each conduit (which can contain interduct) 3-inches diameter, up to 48 square inches in cross sectional area of the cable or conduit.

- Change of Permittee- \$405 to issue new permit when ownership (Permittee) changes with no change in use

#### 4.32.3 Temporary Construction Use

For staging for up to 6 months (If use is expected to be over 12 months, then apply the standard charge for Surface Use, see 3.34.1)

- Initial review or Issuance and Recording permit estimated to require up to 16 hours of SPU time for review or issuance - \$1,300, or

Minimum \$3,000 deposit towards time-and-material for permit estimated to require over 16 hours of SPU time for review, issuance, recording

- One renewal of permit: \$1,800 for each 6-month period up to 12 months total

#### 4.32.4 Recreation trails and park uses

Note - Only governmental entities may apply, may be superseded by Memorandum of Agreement

- Initial review or Issuance and Recording permit estimated to require up to 16 hours of SPU time for review or issuance - \$1,300, or

Minimum \$3,000 deposit towards time-and-material for permit estimated to require over 16 hours of SPU time for review, issuance, recording

- Annual Use fee \$250.00, plus 25 cents per linear foot over 1,000 feet (may be reduced based on off-setting benefits to SPU, e.g., decrease in City's maintenance costs)

#### 4.32.5 Special Short-term Use of SPU real property (land only, not buildings)

- \$ 50 per calendar day to park vehicles, or similar use for community or charity events, and
- \$100 gate-opening fee for one opening and one closing

### **LABORATORY ANALYSIS**

All laboratory analyses will be conducted at the discretion of the Water Quality Laboratory Manager and on the basis of time availability. Prices reflect the cost for routine analyses with standard reporting and turnaround times. The price for analyses not included in this list will be based on the cost for labor, equipment, material and overhead, as determined by the Water

Quality Laboratory Manager. If available and mutually agreeable, analyses may be available on a call out basis at double the charges listed.

4.33	<b>Bacteriological Analysis</b>	<b>Per Analysis</b>
4.33.1	Total Coliform (MF)	\$21
4.33.2	Total Coliform (MPN)	\$18
4.33.3	Total Coliform/E. Coli (MMO/MUG; P/A)	\$14
4.33.4	Coliform verification; including Fecal Coliform/E. Coli (EC/MUG)*	\$21
4.33.5	Fecal Coliform (MF)	\$21
4.33.6	Fecal Strep (MF)	\$18
4.33.7	Enteric culture identification (API)	\$85
4.33.8	Heterotropic plate count	\$23
4.33.9	Pseudomonas (MF)	\$21
4.33.10	Biolog	\$126
4.33.11	Sample prep for non-drinking water (filter/dilutions)	\$12

\*This test is performed on drinking water samples that test positive for Total Coliform by the membrane filtration method. It is used to verify the presence of Total Coliform and simultaneously test for Fecal Coliform and E. Coli.

4.34	<b>Chemical Analysis</b>	<b>Per Analysis</b>
4.34.1	Metals/Inorganics	
4.34.1.1	Metals by Flame AA and Flame Emission Screen	\$16 per element
	Batch of 8 to 19	\$34 per element
	Batch of 20 or more	\$19 per element
4.34.1.2	Metals by Graphite Furnace AA	
	Batch of 1 to 19~	\$38 per element
	Batch of 20 or more	\$25 per element
4.34.1.3	Digestion for non-drinking water samples	\$22 per sample
4.34.1.4	ICPMS 21 element screen $\Phi$	\$219 per sample
4.34.1.5	ICPMS (less than 20 samples, 3 to 7 elements/sample)	\$21 per element
4.34.1.6	ICPMS (20 or more samples for 3 to 7 elements or 10 or more samples for 8 or more elements)	\$14 per element
4.34.1.7	Metals Filtration	\$20 per sample

~ If 2 or more metals can be analyzed simultaneously, then 10 samples of 2 metals qualify for volume discount.

$\Phi$ ICPMS screen includes: Al, Ag, As, Ba, Be, Cd, Co, Cr, Cu, Fe, Hg, K, Mn, Na, Ni, Pb, Sb, Se, Sn, Ti, Zn

4.34.2	Titration	
4.34.2.1	Total Alkalinity	\$18
	Batch of 10 or more	\$13 per sample
4.34.2.2	Calcium or Hardness, edta	\$20
	Batch of 10 or more	\$14 per sample

#### 4.34.3 Organics

4.34.3.1 Total Trihalomethanes (TTHMs)	\$88
4.34.3.2 Total Organic Carbon (TOC)	\$26
4.34.3.3 Haloacetic Acids (HAAs)	\$122
4.34.3.4 Dissolved Organic Carbon (DOC)	\$33
4.34.3.5 DBP Formation/Simulate Distribution System (Prep only)	\$70

~ If 2 or more metals can be analyzed simultaneously, then 10 samples of 2 metals qualifies for volume discount.

#### 4.34.4 Nutrients

4.34.4.1 Total Nitrogen	\$21
4.34.4.2 Total Phosphorus	\$21
4.34.4.3 Nitrate-Nitrite	\$21
4.34.4.4 Soluble Reactive Phosphorus	\$20

#### 4.34.5 Other Procedures

4.34.5.1 Color	\$8
4.34.5.2 Copper (comparator, colorimetric)	\$9
4.34.5.3 Fluoride (potentiometric)	\$12
4.34.5.4 Iron (colorimetric comparator)	\$9
4.34.5.5 pH, potentiometric	\$12
4.34.5.6 Specific conductance	\$9
4.34.5.7 Turbidity	\$8
4.34.5.8 Chlorine Residual, colorimetric	\$9
4.34.5.9 Chlorine Demand	
Single contact time at the requested temperature, pH, and Cl <sub>2</sub> dosage	\$86
For each additional contact time, temperature, pH or Cl <sub>2</sub> dosage on the same water source.	\$28
4.34.5.10 Seepage (minimum - or sum of parameters tested)	\$49
4.34.5.11 UVA (254-545)	\$11
4.34.5.12 SOC-VOC Screen	\$148
4.34.5.13 VOC Screen	\$121
4.34.5.14 Nitrate-Nitrite Screen and UVA	\$23
4.34.5.15 Solids, Total Suspended	\$25
4.34.5.16 Solids, Total Dissolved	\$25

#### 4.35 Limnological Analysis

#### Per Sample

4.35.1 Algal biovolume and identification to genus	\$47
4.35.2 Algal Toxins	\$47
4.35.3 Flavor Profile Analysis (FPA) and Flavor Rating Assessment (FRA)	\$57